

REMARKS

The Final Office Action dated March 6, 2003 and the Advisory Action dated June 23, 2003 have been considered.

Summary of the Final Office Action and Advisory Action

In the Final Office Action, claims 6, 10, and 11 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 5,933,508 to Fuke et al. (hereinafter "Fuke"). Claims 7-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fuke in view of U.S. Patent No. 4,351,411 to Inoue.

In the Advisory Action, the Examiner states that the Response filed on June 4, 2003 is not deemed to place the application in condition for allowance.

Summary of the Final Office Action and Advisory Action

Applicants have amended independent claim 6 to differently describe the invention. Also, new dependent claim 12 has been added. In light of the amendment to claim 6 and the addition of new dependent claim 12, the dependencies of claims 8, 9, and 11 have been changed to be dependent on newly-added claim 12.

Rejections under 35 U.S.C. §§ 102(b) and 103(a)

In the Final Office Action, claims 6, 10, and 11 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Fuke. Claims 7-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fuke in view of Inoue. To the extent that these rejections might still apply to the claims as newly-amended, they are respectfully traversed as follows.

The Final Office Action alleges that the newly-applied Fuke reference teaches all of the limitations of independent claim 6 and dependent claims 10 and 11. In particular, in the Final Office Action, the Examiner alleges that reference numeral 21 of Fuke corresponds to the metallic plate that is attached to a heat radiating side of the diaphragm for radiating heat generated in the voice coil, voice coil bobbin and diaphragm, as recited in independent claim 6. Applicants respectfully traverse this interpretation of Fuke for at least the following reasons.

Applicants respectfully submit that while Fuke does describe providing a plate 21 made of a magnetic material, there is no teaching or suggestion in Fuke that this plate 21 is a metallic plate for radiating heat generated in the voice coil, voice coil bobbin and diaphragm, as recited in independent claim 6. Fuke does not refer at all to the issue of heat radiation from the voice coil, voice coil bobbin and diaphragm with regard to the plate 21. Instead, as discussed in the Abstract of Fuke, the plate 21 is part of a magnetic circuit that works together with the voice coil to produce forces to actuate the diaphragm. The plate 21 of Fuke's arrangement is also disclosed as cooperating with a yoke to define a gap in which a coil bobbin is inserted.

In order to emphasize this distinction, independent claim 6 has been newly-amended to replace "metallic plate" with "heat radiation member" to thus recite "a heat radiation member attached to a heat radiating side of the diaphragm for radiating heat generated in the voice coil, voice coil bobbin and diaphragm."

Applicants respectfully submit that the location of the heat radiation member, as recited in independent claim 6, results in a significant feature of the instant invention.

The right-hand most sloped portion of the instant application's Fig. 3 illustrates a "heat radiating side" of the diaphragm. The speaker diaphragm of the arrangement disclosed in the instant application includes a heat radiation member (metallic plate 81) attached to the heat radiating side of the diaphragm to facilitate heat radiation to the atmosphere from the diaphragm.

Applicants note that the recited heat radiating side is not the "conical portion" of the diaphragm, for example, because the Applicants' invention can be applied to a non-conical diaphragm, such as a flat type or a dome type arrangement, as described in the instant application's specification at page 5, lines 13-14, for example.

As discussed above, the plate 21 of Fuke is an element of a magnetic circuit. It is not an element involved in heat radiation. Fuke's diaphragm is a conical diaphragm and there is no teaching or suggestion in Fuke of providing an element attached to this conical portion of the diaphragm for heat radiation in the manner recited in at least independent claim 6.

Accordingly, Applicants respectfully submit that Fuke, like Inoue, fails to meet at least the limitation of a heat radiation member for radiating heat generated in the voice coil, voice coil bobbin and diaphragm, as recited in independent claim 6. Applicants note that similar distinctions were asserted in the previous Amendment filed on January 2, 2003 with regard to Inoue and the Examiner apparently agreed with those arguments by not applying Inoue against independent claim 6 in the Final Office Action. However, Applicants respectfully submit that, like Inoue, the newly-applied Fuke reference also

does not teach or suggest these features and the rejection of independent claim 6, as well as the rejections of dependent claims 7-11, should accordingly be withdrawn.

As discussed above, Applicants respectfully assert that the rejection under 35 U.S.C. § 102(b) should be withdrawn because Fuke does not teach or suggest each feature of independent claim 6. As pointed out in MPEP § 2131, "[t]o anticipate a claim, the reference must teach every element of the claim." Thus, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. v. Union Oil Co. Of California, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987)." Furthermore, Applicants respectfully assert that dependent claims 10 and 11 are allowable at least because of the dependence from independent claim 6, and the reasons set forth above.

With regard to the rejections of dependent claims 7-9 under 35 U.S.C. § 103(a), Applicants respectfully submit that these dependent claims are allowable for at least the same reasons as independent claim 6 and that Inoue fails to cure the deficiencies of Fuke.

New Claims 12-16

Applicants have added new claims 12-16 to differently describe the invention. In particular, new independent claim 13 is presented to recite a speaker diaphragm arrangement that includes a heat radiation member "attached to a main acoustic side of the diaphragm adjacent to, and extending radially from, the voice coil bobbin in a direction towards the edge portion, wherein the heat radiation member allows for radiation of heat generated in the voice coil, voice coil bobbin and diaphragm." It is

respectfully submitted that the applied art of record does not teach or suggest such an arrangement.

New dependent claim 12 is added in light of the amendment to independent claim 6. Moreover, new dependent claims 14-16 are presented that are dependent from independent claim 13. Applicants respectfully submit that these dependent claims are allowable at least for the same reasons as their respective independent claims.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application, withdrawal of all rejections, and the timely allowance of all pending claims 6-16.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite the prosecution.


EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be

required, including any required extension of time fees, or credit any overpayment to Deposit Account 50-0310. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

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Dated: July 7, 2003

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